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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/447,430	11/23/1999	TAKASHI NAKAYAMA	1982-0140P	3800

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EXAMINER

HANNETT, JAMES M

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/447,430

Applicant(s)

NAKAYAMA ET AL.

Examiner

James M Hannett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/23/1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Digital camera with an LCD screen that is illuminated by a lamp only when an image frame forward switch is turned on.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 1: Claims 1, 2, 4, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,577,338 Tanaka et al in view of JP 10-096619 Enomoto.
- 2: As for Claim 1, Tanaka et al teaches in Figure 1 display device (7) which displays an image on the basis of image data and which switches from display of one image to display of

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another image using the switches (12a-c), the display device (7) being structured such that an image displayed thereon can be confirmed regardless of the existence of auxiliary light; an auxiliary lamp (7b) which illuminates auxiliary light onto the display device; a designating device for designating switching of an image (12a-c) Tanaka et al teaches on Column 5, Lines 8-28 that the switches 12b and 12c are used to select an image frame to be displayed on the LCD screen. The auxiliary lamp is viewed as the back-light circuitry. Tanaka teaches the use of a control device (12b and 12c) for, in a case in which the designating device designates switching of an image, controlling the display device such that a displayed image is switched to another image which is then displayed

Tanaka does not teach that when the switch to switch the displayed image is pressed that the auxiliary lamp is turned on, and in the case in which the designating device does not further designate switching of an image even after a predetermined amount of time has elapsed from the time an image was switched to or from the time the auxiliary lamp was lit, the control device turns off the auxiliary lamp.

Enomoto teaches in the abstract and on Paragraph [0013] that it is advantageous when using electrical devices with LCD screens to enable the devices with control circuitry that enables the back-light to go off after no buttons have been pressed or commands executed for a predetermined amount of time. Enomoto teaches that this is advantageous because LCD displays consume a lot of energy and by turning off the back-light after a period of non-use battery life can be preserved.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Tanaka et al with the circuitry of Enomoto that

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allows the back-light to be turned on by the pressing of a button and off after a predetermined amount of time when no buttons are pushed in order to preserve the battery life of the camera and decrease energy use.

3: In regards to Claim 2, Enomoto further teaches in Paragraph [0015] the use of setting means for setting the predetermined amount of time.

4: In regards to Claim 4, Enomoto teaches that when a button is pressed the back-light will come on. Therefore, when used in the camera of Tanaka et al when the button to switch the image is pressed the back-light will come on. In the case in which the designating device designated switching of an image, the control device turns the auxiliary lamp on when the image to be switched to can be displayed on the display device.

5: As for Claim 7, Claim 7 is rejected for reasons discussed related to Claim 1, since Claim 1 is substantively equivalent to Claim 7.

6: In regards to Claim 8, Tanaka in view of Enomoto teaches the invention as discussed in Claim 1. Tanaka further depicts in Figure 4 that the device is a Camera (101) and has a display panel (7)A digital camera having a photographing means for photographing a subject, and an image display device for displaying an image on the basis of image data obtained by photographing the subject by the photographing means.

7: Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,577,338 Tanaka et al in view of JP 10-096619 Enomoto in further view of official notice.

8: In regards to Claim 3, Official notice is taken that it was well known in the art at the time the invention was made to make electronic devices that have LCD screens that are back-lighted. Furthermore, it was well know in the art to allow a user to specify the amount of time a back-

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light should stay on after a button is released. Official notice is taken that the time the light should stay on for could be set to any value including zero so that the light would not stay on after a user released there finger from a button in order to conserve the most battery power.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Tanaka in view of Enomoto to set the predetermined amount of time to any value including zero in order to allow the user more flexibility and to allow to the saving of maximum battery life.

9: Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,577,338 Tanaka et al in view of JP 10-096619 Enomoto in further view of USPN 5,748,237 Ueda et al.

10: As for Claim 5, Tanaka et al in view of Enomoto teaches the Claimed invention as discussed in Claim 1. However, Tanaka et al in view of Enomoto are silent as to the construction of the LCD display panel.

Ueda et al teaches in Figure 1 and on Column 3, Lines 1-33 the construction of a LCD display panel that includes: an image display portion (2) which displays an image; a light guiding path (9) which guides auxiliary light from the auxiliary lamp (5) to the image display portion (2); and a semi-transparent film which is disposed between the image display portion and the light guiding path, and which reflects a portion of the light which is incident through the image display portion. Uedo teaches that this construction is advantageous because it allows for the use of both ambient light and a back-light therefore decreasing the power requirement of the back-light and therefore, saving energy.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the construction of the LCD screen of Uedo for the LCD screen of Tanaka et al in view of Enomoto in order to decrease the power requirement of the back-light by allowing for the use of both ambient light and back-light.

11: In regards to Claim 6, Tanaka et al in view of Enomoto teaches the Claimed invention as discussed in Claim 1. However, Tanaka et al in view of Enomoto are silent as to the construction of the LCD display panel.

Ueda et al teaches in Figure 1 and on Column 3, Lines 1-33 the construction of a LCD display panel that includes: an image display portion (2) which displays an image; a light guiding path (9) which guides auxiliary light from the auxiliary lamp (5) to the image display portion (2); and a semi-transparent film which is disposed between the image display portion and the light guiding path, and which reflects a portion of the light which is incident through the image display portion. Uedo teaches that this construction is advantageous because it allows for the use of both ambient light and a back-light therefore decreasing the power requirement of the back-light and therefore, saving energy. Uedo further teaches on Column 2, Lines 61-67 a light intake means (6) which is connected to the light guiding path, takes in exterior light, and guides the taken-in light to the light guiding path.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the construction of the LCD screen of Uedo for the LCD screen of Tanaka et al in view of Enomoto in order to decrease the power requirement of the back-light by allowing for the use of both ambient light and back-light.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPN 5,872,515 Ha et al teaches the use of a laptop computer that has a LCD screen that has a back-light; USPN 6,333,773 Faris teaches the construction of a LCD display panel that has a back-light; USPN 6,085,048 Mikoshiba et al teaches the use of a camera that has a LCD display panel that has a back-light; USPN 5,966,553 Nishitani et al teaches the use of a still camera that has a LCD screen that has a back-light.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-842-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to customer service whose telephone number is 703-308-6789.

James Hannett
Examiner
Art Unit 2612

JMH
June 26, 2003


WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
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